Stormwater Management Program (SWMP)

For the
City of Tucson
Stormwater

AZPDES Permit No. AZS000001-2010

Revised
June 18, 2012

The City of Tucson's
Stormwater Management Program
(SWMP)

I. Public Education and Outreach

A. Permit Requirements

Tucson shall provide outreach and education to the general public on the Stormwater program issues and requirements. The following will detail the outreach strategy used.

Public education and outreach will be provided to one target group each year. These may include: the general public, residential, community, home owners, Home Owner Associations, or schools. A different group will be targeted each year.

One or more topics shall be used in the public education and outreach each year, but the topic or topics shall be different each year. The following topics will be used:

- Post-construction ordinances and long-term maintenance requirements for permanent Stormwater controls
- Stormwater runoff issues and residential Stormwater management practices
- Potential water quality impacts of application of pesticides, herbicides and fertilizer and control measures to minimize runoff of pollutants in Stormwater
- Potential impacts of animal waste on water quality and the need to clean up and properly dispose of pet waste to minimize runoff of pollutants in Stormwater
- Illicit discharges and illegal dumping, proper management of non-stormwater discharges, and to provide information on reporting spills, dumping, and illicit discharges
- Spill prevention, proper handling and disposal of toxic and hazardous materials, and measures to contain and minimize discharges to the storm sewer system
- Installation of catch basin markers or stenciling of storm sewer inlets to minimize illicit discharges and illegal dumping to the storm sewer system
- Proper management and disposal of used oil

The outreach topic selected and the target group shall be reported in the Annual Report each year, as well as an estimated number of participants reached.

Business sector education/outreach shall be provided to at least one target group each year on one or more appropriate topics. The outreach approach selected, the topic, the target group, and an estimated number of participants reached will be documented in the annual report. One or more of the following topics will be used each year:

- Planning ordinances, grading, and drainage design standards for Stormwater management in new developments and significant redevelopments
- Municipal Stormwater requirements and Stormwater management practices for construction sites.
- Illicit discharges and proper management of non-stormwater discharges

- Spill prevention, proper handling of toxic and hazardous materials, and measures to contain and minimize discharges to the storm sewer system
- Proper management and disposal of used oil and other hazardous or toxic materials, including practices to minimize exposure of materials/wastes to rainfall and minimize contamination of Stormwater runoff
- Stormwater management practices, pollution prevention plans, and facility maintenance procedures

B. Implementation

Stormwater Outreach

The City of Tucson attends a variety of Stormwater-related public awareness activities during the year including Earth Day, two Water Festivals, a Health and Safety Fair, Operation Splash, Monsoon Safety Awareness Week, events at Ward Offices and attending Southern Arizona Home Builders Association (SAHBA) meetings. A variety of Stormwater handouts are distributed at these events. These include: Yard and Landscape Waste Disposal, Fix Leaky Vehicles, Ten Tips to Prevent Stormwater Pollution, Clean Up After Your Critters, Water Harvesting Guidance Manual, Discharge Guidelines for Pools and Spas, General Construction Flyer, and Best Management Practices (BMP) flyers. These brochures target the general public, the business community, the construction and development community, and schools.

The City also partners with Pima Association of Governments (PAG) and other jurisdictions to create public awareness of stormwater issues through radio advertisements, interviews, public service announcements, billboards, magazine ads, movie theater slides, brochures, bus interior posters, and web pages.

Ongoing public education and outreach includes presentations at schools, distribution of the middle school activity book, *Stormwater in the Desert*, with its interactive website activities, and distribution of the elementary school activity book, *Desert Wash Safety Activity Book,* at schools, dentists' and doctors' offices.

The City's ongoing catch basin identification program includes placing weather-resistant metal disks bearing the slogan, "Only Rain in the Drain" near catch basins that are more likely to receive illegal dumping.

In order to inform citizens about the importance of preserving naturally vegetated watercourses, the City has continued a program to install signs identifying washes by name at significant road crossings. If the public is aware of the location and name of their local washes, they may be more likely to protect the wash as a natural resource.

Educational Program for Developers and Contractors

Construction information packets containing guidance on complying with the AZPDES General Permit for Construction are distributed throughout the year. The City of Tucson Stormwater Management Section distributes various flyers on General Construction Procedures, SWPPP Guidelines, and Construction Best Management Practices (BMP). The Stormwater Management Section also produced the Water Harvesting Guidance Manual to assist the development community in complying with Land Use Code requirements and low-impact development to maximize use of water harvesting.

A Construction Seminar is held each year in cooperation with Pima Association of Governments (PAG), Arizona Department of Environmental Quality (ADEQ), and surrounding jurisdictions.

Educational Program for Businesses and Industries

Business and Industrial education is provided by flyers handed out during the year as needed. Information packets and guidance for industrial facilities include information on the "No Exposure" certification process and an example SWPPP for a local industrial site. Flyers have been developed for Carpet Cleaners, Auto Paint and Body Shops, Auto Repair Shops, Brake Repair Shops, Food Service, Fuel Stations, Auto Salvage Yards, Fabricated Metal Products, Liquid Waste Recyclers, Parking Garage and Parking Lots, Printers and Publishers, Pool and Spa Companies, and Vehicle and Equipment Mobile Cleaners.

The Stormwater Management Section conducts an annual informational mailing to industrial facilities potentially regulated by the Environmental Protection Agency (EPA) and ADEQ multi-sector general permit and sends guidance materials to targeted industrial facilities.

Environmental Services - Recycling Education

The City of Tucson Environmental Services Department gives presentations to schools, and promotes City recycling programs at special events through news releases, newsletters, flyers and brochures distributed to the community. This program includes blue barrel curbside recycling and 14 Neighborhood Recycling Centers (NRCs). Outreach to children includes providing brochures, stickers, recycled rulers, recycled pencils, magnets, recycled water bottles and height charts. Los Reales Landfill also accepts scrap metal for recycling, TV's and personal computers.

Tucson Water

Tucson Water engages in a wide variety of educational outreach activities intended to increase awareness and encourage citizen action in water-related areas. The outreach program is largely targeted at promoting water conservation and water use efficiency. Tucson Water sub-contracts with Environmental Education Exchange to provide water-related programs and presentations to students.

Stormwater Harvesting

The City allows private citizens to do stormwater harvesting by allowing curb cuts that enable stormwater to flow into water harvesting depressions.

Tucson Clean and Beautiful

Recycling Education programs serve the greater Tucson-eastern Pima County metropolitan area. Programs include coordination of a live and recorded Recycling Information Line which serves as a clearinghouse for providing area residents with information on recycling and waste reduction programs including curbside recycling, neighborhood recycling centers, Household Hazardous Waste, and other available community environmental programs. Callers also may request brochures, information directories, and other resources by mail, email, and on the Internet.

The Recycling Education Coordinator also manages *E Pluribus Recycles,* an educational play teaching recycling and waste reduction concepts to elementary school students annually. Tucson Clean & Beautiful also produces a periodic email newsletter that is now available online, highlighting local environmental education events and community volunteer opportunities while encouraging involvement in the organization's programs.

Household Hazardous Waste

Household Hazardous Waste distributes brochures on how to properly dispose of auto fluids, batteries, paints and solvents, pool chemicals, and pesticides. The program provides information to businesses through their Small Business Waste Assistance Program.

C. Five Year Plan

The City of Tucson Stormwater Section has developed a five-year public education and outreach plan to focus on specific target audiences and topics, as required under the permit. The plan includes the following:

Fiscal Year	Target Audience	Topic
2011-2012	• General Public • Schools	• Potential impacts of animal waste on water quality
2012-2013	• General Public • Municipal Employees • Shopping Centers • Auto Industry	• Proper management and disposal of used oil. • How to clean up spills
2013-2014	• General Public • Home Owners • Home Owners Associations	• Wash Protection, Wildcat Dumping • Illicit discharges and illegal dumping, proper management of non-stormwater discharges
2014-2015	• General Public • Community • Development Community	• LID Outreach • Water conservation
2015-2016	• General Public • Lawn & Garden Centers	• Potential water quality impacts of pesticides, herbicides, and fertilizers

II. Public Involvement and Participation

A. Permit Requirements

Tucson shall engage the public to help spread the message on preventing Stormwater pollution, to undertake group activities that highlight storm drain pollution, and contribute volunteer community actions to restore and protect local water resources. The following will detail the outreach strategy used.

The City shall implement at least one of the following during each year of the permit to provide fundamental support to the City's Stormwater Management Plan (SWMP). The number of complaints/reports, amounts of garbage/waste collected, attendance at public/volunteer activities, and effectiveness and evaluation of each activity shall be documented in the Annual Report.

- Provide the opportunity to involve the public in the City's Stormwater management program and to encourage public participation in monitoring and reporting spills, discharges, or Wildcat dumping within their communities (such as facilitation of neighborhood watch groups) once per year.
- Provide the public with an opportunity to participate in the City's Stormwater management program, such as voluntary litter control activities (e.g., facilitation of Adopt-A-Wash, Adopt-A-Park, and Adopt-A-Street litter control activities) or voluntary erosion control projects. Maintain and support program as a regular ongoing activity.
- Provide the public with a household hazardous waste program to facilitate proper disposal of used oil, antifreeze, pesticides, herbicides, paints, and other hazardous and toxic materials by City residents (such as scheduled household hazardous waste collection events or operation of full-time disposal facilities) a minimum of two (2) times per year for the first two (2) years of the permit, three (3) times per year for years three (3) and four (4) of the permit, and every year thereafter.

Tucson shall provide and publicize a reporting system to facilitate and track public reporting of spills, discharges or dumping to the storm sewer system ("Report a Concern" on the Stormwater web site, Incident Report database kept by Stormwater Inspectors).

The current SWMP shall be posted no later than one year from the effective date of the permit. The latest Annual Report shall be posted on the City's web site immediately after completion each year.

B. Implementation

Public Reporting of Concerns
Spills, discharges, or dumping may be reported by using the Stormwater Management Section's web site and the "Report a Concern" link.

Environmental Services – Recycling
The City of Tucson Environmental Services Department provides an opportunity for residents to participate in residential recycling. Tucson residents and businesses are able to recycle a wide variety of material – especially plastics. Curbside pickup for recycled items is available on the same day as the resident's trash pick-up. Neighborhood Recycling Centers are drop-off sites located throughout Tucson where residents can take any recyclables accepted in the Blue Barrel Recycling Program.

Tucson Clean and Beautiful
Tucson Clean and Beautiful is a nonprofit environmental organization funded in part by the City of Tucson, Pima County, private and corporate grants, and community membership donations. Through the Adopt-A-Park and Adopt-A-Wash program, public areas have been officially adopted by community volunteer groups, including schools, neighborhood and civic associations, government, and religious organizations. These groups make an ongoing volunteer commitment to clean up litter and provide assistance in monitoring and reporting maintenance concerns at their adopted area. Volunteer removal of litter and illegally dumped material from public areas helps to reduce impacts to Stormwater quality.

Trees for Tucson is a grassroots urban forestry program that advocates planting desert-adapted, low-water-use trees in order to increase shade tree cover that acts to decrease the volume of direct Stormwater runoff. Shade trees also help trap pollutants to improve water quality, stabilize soil and prevent soil erosion. Tucson Clean and Beautiful produces a periodic e-mail newsletter and hosts a website. These online resources complement information shared by phone, in person and in brochure format, highlighting local environmental education events and community volunteer opportunities. These programs, as well as the central message of Tucson Clean and Beautiful, encourage the public to act responsibly in ways that improve and promote Stormwater quality.

Household Hazardous Waste
The City of Tucson provides year round Household Hazardous Waste (HHHW) disposal services through a central dedicated hazardous waste facility and five Antifreeze, Batteries, Oil and Paint (ABOP) drop-off sites. The Household Hazardous Waste Collection program distributes outreach materials to the General Public through direct mailings, handouts, at public events and facilities on topics including proper disposal of auto fluids, batteries, paints and solvents, pool chemicals, and pesticides. Educational materials provided to the public include a brochure describing the collection site locations, hours of

operations, and tips on how to reduce environmental impacts. The public participates in the program by visiting the facilities and dropping off their household hazardous waste.

The program also provides information to businesses through the Small Business Waste Assistance Program. Waste collection is available to Conditionally Exempt Small Quantity Generator (CESQG) that generates small quantities of hazardous waste.

III. Illicit Discharge Detection and Elimination (IDDE)

A. Municipal Employee Training

1. New Employees: During their first year of employment with the City, all employees take the initial Occupational Safety and Health Administration (OSHA) training that includes identification and reporting of spills and illicit discharges. New employees are instructed to report all suspicious non-storm flows to the Stormwater Management Section for investigation and action as necessary.

2. Current Employees: Current City employees are required to take annual OSHA refresher training through the City's On-line University. Every other year, this mandated training includes information on detecting and reporting spills and suspicious non-storm flows. The training instructs observers to report non-storm flows and spills that threaten to reach the stormdrain system to the City's Stormwater Management Section.

3. Current Stormwater Employees: Stormwater Inspectors receive annual refresher training prior to inspecting the major outfalls and field screening points. These inspections are generally conducted during the regional drought periods of spring and fall. Training includes an in-office review of field protocols, inspection forms, sampling procedures, (including sample methods and the use of chain of custody forms), the use of the City's GIS Hydrologic and Wash map which includes the City's stormdrain system and watercourses, and data entry for the field screen database.

    a. Training Description: During this training, stormwater inspectors familiarize themselves with the Center for Watershed Protection's 2004 Illicit Discharge Detection and Elimination Guidance Manual, as well as outreach materials with information on eliminating potentially polluting discharges. Examples of these outreach materials along with enforcement protocols and the City's "Dry Weather Field Screening of Outfalls (FSO)" protocol are included in the Stormwater Inspector Manual. The Field Screen Protocol is included in the Appendix. Field training is scheduled for the first day of annual field screening, and includes the use of the Storm Water Test Kits, and visual investigation processes.

4. Training for Select Groups: The City of Tucson is in the process of identifying "Select Groups" of City Employees to receive information targeted at eliminating potentially polluting discharges. These groups include: Tucson Fire Department Hazardous Materials Unit, Tucson Water Inspectors, and staff from Streets and Traffic Maintenance Division. The City has developed stormwater pollution awareness training and will present to these groups once every two years.

B. Spill Prevention and Response

1. Protecting the Stormdrain System from Spills:
   Spill response within the City is provided by the Hazardous Materials Unit of the Tucson Fire Department. They have been trained to berm or protect stormdrain inlets as practical and appropriate in the event of a spill. As First Responders, they provide technical spill response expertise and oversight and initiate the City's Hazard Communication Protocol. Among other requirements, this protocol specifies that in the event that a spill threatens to reach the City's stormdrain system, the Stormwater Section should be notified. Stormwater personnel can provide specific information on the stormdrain system in the area of the spill and, if necessary, provide instructions on protecting or cleaning the stormdrain.

2. Spill Prevention at Municipal Facilities:
   In 1997, The City of Tucson implemented a Citywide Hazardous Substance/Spill Response Policy. Spill prevention practices required at City facilities include;
   - reduction of the use of toxics,
   - reduction in the quantities of these materials that are stored,
   - use of secondary containment,
   - bermed and covered storage areas where warranted, and
   - readily accessible spill kits.

   The policy defines spill responsibilities for each City Agency and includes specific procedures to follow in the event of a spill, including provisions to notify the Stormwater Management Section in the event that a spill threatens the stormdrain system. The policy includes specific procedures to follow in the event of a spill that includes isolating the area, documenting proper disposal of wastes and documenting the incident. Since July of 1998, all spills at City facilities have been reported to the Environmental Services Technical and Support Division for inclusion in a centralized database. (Appendix)

3. Used Oils and Toxic Control Measures:
   Proper use, storage, transport and disposal of used oil and other hazardous or toxic materials and wastes is achieved in three ways. First, City employees are required to take an annual OSHA refresher course through the City's On-line University. This training includes proper handling, transport, and disposal of potential stormwater pollutants.

Secondly, inspection of all City owned and operated facilities are conducted annually by the City's Multi-Agency Inspection Team (MAITs). These inspections include a multi-disciplinary team consisting of representatives from Tucson Fire Department, Central Safety Services, Risk Management, and Stormwater Management Section among others. The MAITs inspectors assure that spill prevention practices are followed at all City owned and operated facilities.

Third, the Tucson Fire Department funds the City's Hazardous Waste Disposal Program. Under this program, the Fire Department is responsible for providing technical expertise, trained and equipped personnel for the prevention, mitigation and resolution of incidents involving hazardous substances and wastes. The Tucson Fire Department insures that City facilities properly dispose of hazardous wastes.

To meet the requirements of the City's new MS4 permit, during fiscal year 2011-2012, the Stormwater Inspector assigned to MAITs will perform and document assessments of City facilities where more than five gallons of potentially polluting materials are stored in outside areas.

Spill procedures are readily available at all City facilities where materials subject to spills are stored or used. During fiscal year 2012-2013, the City will modify the existing Hazardous Substances/Spill Policy by adding site specific information. Once completed, the MAITs Stormwater Inspector will review site specific spill procedures every two years.

C. Major Outfalls and Field Screening Points

1. Outfall Inventory. In the early 1990s, the City of Tucson followed the procedures outlined in 40 CFR 122.26 to identify 500 outfalls which have been subsequently utilized to detect non-storm flows. These outfalls have been mapped on the City's GIS Hydrologic and Wash map that includes the City's stormdrain system. A map showing these 500 outfalls is included in the Appendix. During the first year of the permit term, the City has mapped additional outfalls determined to be an inspection priority for illicit discharge screening.

2. Field Screening Procedures. The City has developed procedures for inspecting field screening points to document conditions and screen for presence of potential illicit discharges. The City has developed a database to track and record all findings. Procedures for inspecting outfalls include visual inspection for flow, trash, suds, odors, and other indicators of potential illicit discharges. The City follows the protocol established under the 40 CFR 122.26 requirements for the Phase I MS4 permit application. These requirements include conducting field screening utilizing the Storm Water Test Kits when flow is observed. If the field test indicates the

presence of contaminants, a sample is collected and submitted to the laboratory for analysis, and an investigation to determine the source of the flow is conducted. If flow is present, re-inspection after 24 hours is required to determine if the flow is still occurring.

D. Inspection of Major Outfalls

1. Inspection Priorities and Schedule: To meet the requirements of the City's new MS4 permit, the City will inspect the developed watershed upstream of Lakeside Lake, impaired water, to determine if there are outfalls to the Atterbury Wash which should be included as priority dry weather screening points. In addition, the City will review the database to determine if there have been any instances where illicit discharges have not been eliminated or determined not to be a significant source of pollutants. Once identified as a priority, these outfalls will be inspected annually.

2. Of the City's 500 identified outfalls, 20% are inspected every year, and records of the inspection, any observations, any analytical data, and any follow-up actions are documented in the City's Field Screen Outfall Database.

3. During Industrial facility inspections, the City inspector inspects drainage within the facility, looking for evidence of non-storm flow which could indicate a cross-connection or other illicit discharge. Any findings are documented on the Stormwater Industrial Inspection Summary, which is included in each annual report. If any concerns are noted, the Stormwater Inspector takes actions to educate the facility operator or enforce the provisions of the City's Stormwater Ordinance (SWORD) as appropriate.

E. Investigation of Potential Illicit Discharges

1. Dry Weather Discharges: The City has developed Dry-Weather Field Screening of Outfalls (FSO) Protocol that includes details for investigating dry weather discharges, including criteria to identify, characterize, and prioritize dry weather flows as well as practices to determine and evaluate the source of the flow and to follow a 60 day schedule to eliminate potentially polluting non-storm flows or take enforcement actions where the source is known.

2. Existing Dry Weather Flows: Currently, there are no known illicit discharges to the City's MS4 that have not yet been resolved. When one of the 500 field screen locations shows evidence of dry weather flow, and past records indicate that the outfall was previously identified as having evidence of dry weather flow, it is re-evaluated to insure that the flows are still not considered to be a source of pollutants. Because it takes five years to inspect all 500 outfalls, this means that all outfalls with known dry weather flow are periodically checked for continuing flow.

3. Illicit Discharge Investigation (Source Identification): If flowing or ponded water is present at a field screening location, and the field test kit identifies any contaminate (as indicated by any positive test result), the inspector *immediately* investigates to determine the source of the water. This may include searching up gradient in the drainage (manholes, inlet grates, catch basins, *etc.*) for inflows and/or illicit connections, reviewing stormdrain maps and records of the area, and interviewing persons who work at possible sources of inflow.

4. Tracking and Reporting: The City utilizes a field screening outfall database (FSO) for all of the data collected during dry weather field screening. The database is organized by outfall, and previous inspection records are readily accessible. The database also includes fields where field observations, field testing results, any laboratory results and follow-up actions can be recorded. A summary report is prepared based on the current information contained in the database. A map can be generated based on the database and will be included in the annual report. The map indicates which outfalls were flowing, or had evidence of recent flow, and any outfall where field testing was conducted, or samples were collected for laboratory analysis. Any outfalls with indications of recent flow are re-inspected within three days and if flows are observed, then the field test kits are utilized to conduct tests. If any contaminate is detected, a sample is collected for laboratory analysis. (put in annual report)

5. Illicit Discharge Elimination: The City of Tucson MS4 system has few closed conduits; the majority of the stormdrain system consists of open channels and natural and improved washes. Conducting follow-up investigations of dry weather flows can be as basic as following the flow path upstream to the source. In the event that the flow passes through an underground conduit, Stormwater Inspectors utilize the GIS Hydrology and Wash Map to determine the flow path of the discharge. If the source can be determined and has the potential to be a source of pollutants, as evidenced by field or laboratory testing, it should be considered illicit. The following steps are taken to cease the discharge to the stormdrain system: discussion with responsible parties, distribution of guidance materials, issuance of a written or verbal warning, issue of a notice of violation, issue of a citation, and notification of regulatory authorities.

6. Public Awareness and Reporting of Potential Illicit Discharges: The City utilizes an integrated stormwater quality education program that includes messages on recognizing and reporting suspect non-storm discharges. This program includes stormdrain inlet markers bearing the slogan, “Only Rain in the Drain,” wash identification signs with the admonition to “Protect Our Natural Watercourses,” and “No Dumping” signs at washes where illicit dumping has been known to occur. Citizens with concerns regarding suspect non-storm or dry weather flows are directed through the City’s website to a “report a concern” link that sends an email

alerting the Stormwater Section. Detailed discussion of the City's Stormwater Quality Education Program can be found under I. Public Awareness and Outreach.

7. Investigation of Reported Potential Illicit Discharges: Stormwater Inspectors investigate reports of dry weather flows to determine if they are significant sources of pollutants. Due to the nature of the City's stormdrain system, sampling is not usually the first course of action when investigating a non-storm flow. The City's stormdrain system contains limited subsurface conduit, and is primarily comprised of natural and improved open channels. Usually, the inspector can trace the flow path and identify the source. Typical dry weather flows include discharges from pools and irrigation overflow. The Dry Weather Field Screen Protocol discussed in E.1 includes a list of allowable dry weather flows and criteria to determine if a suspect flow is a significant source of pollutants.

8. Responding to Reports of Potential Illicit Discharges: Stormwater Inspectors respond to a minimum of 90% of reports of illicit discharges by initiating an inspection to determine the source.

9. Investigating Potential Illicit Discharges: Stormwater Inspectors investigate a minimum of 80% of potential illicit discharges identified by field screening, public reporting, or other detection methods, such as reports by other City Departments or Government Agencies, within three days of the detection or report. When discharges contain obvious indicators of pollutants as determined by visual observation or field testing, then the investigation is initiated immediately.

F. Illicit Discharge Elimination

1. Illicit Discharge Ordinance: The City has adopted the Stormwater Ordinance or SWORD which prohibits the discharge of all sources of pollutants to the City's stormwater drainage system, including non-storm flows and illicit discharges. The SWORD contains provisions to enforce against any party shown to be discharging pollutants to the stormdrain system and requires the responsible party to eliminate the discharge, and perform clean-up activities as needed or face penalties.

2. Non-Stormwater Discharge Evaluation**:** Discharges which qualify for the AZPDES De Minimus General Permit are not prohibited. Qualifying Discharges include:

    - Discharges associated with operation and maintenance of the potable or reclaimed water systems, well development, or well monitoring,
    - Residential dechlorinated swimming pool discharges,
    - Discharges from residential coolers and air conditioning condensate,
    - Discharges from residential or charity exterior car washing where only water or biodegradable soaps are used,

- Building or street wash water where only water or biodegradable soaps are used.

If the source of the discharge qualifies for the De Minimus General Permit, and if the results of the field tests are negative, then the discharge is not considered to be a significant source of pollutants. Please note, however, that swimming pool (and spa) discharges should follow Stormwater Management Section guidelines. If the source qualifies for the De Minimus General Permit and field test results indicate the presence of pollutants, ADEQ should be notified.

3. Non-stormwater Discharge Records: The City maintains a database of tracking and recording non-stormwater discharges.

G. Compliance Activities/Enforcement

The City of Tucson has developed Enforcement Guidance that includes prioritizing the violation, as either a very minor deficiency, a minor deficiency, or a major deficiency. Depending on the severity of the infraction, the Stormwater Inspector can issue a verbal or written warning with an opportunity to resolve the condition within a set time frame, a notice of violation, or a citation. Resolution must be reached on 80% of these incidents within one year, or the violation is transferred to the City Court. The Compliance Process flowchart is in the Appendix.

IV. Municipal Facilities Pollution Prevention/Good Housekeeping Program

A. Employee Training

New City employees attend mandatory OSHA training during their first year and ongoing employees receive OSHA training every other year as discussed in the previous section. Current OSHA training for City of Tucson employees includes the following key subject areas:

1. Spill Training: topics covered include prevention, response and practices to prevent or minimize spills or discharges to the City's stormdrain system, and

2. Proper Handling, storage, transport and disposal of used oil and other toxics and hazardous materials and wastes to prevent spills, exposure to rainfall, and contamination of stormwater runoff.

Specialized training for Stormwater Inspectors includes the following:

1. Stormwater management practices and pollution prevention plans.

2. Review of applicable local regulations such as the Floodplain Ordinance, WASH and Environmental Resource Zone (ERZ) watercourse regulations, the Stormwater Ordinance, Watercourse Maintenance Guidelines, and supporting development standards of Tucson Code.

3. Review of stormwater discharge regulations and permit requirements, including the Stormwater Management Plan (SWMP).

Tucson Department of Transportation (TDOT) Stormwater Inspectors receive training during their first year of employment and refresher training every other year. New Stormwater employees each receive a copy of the Stormwater Inspector Manual that includes information on applicable ordinances and regulations, development standards and the Watercourse Maintenance Guidelines. Every other year, Stormwater Inspectors review and update these materials as appropriate.

On-going training for Planning and Development Services Department Stormwater staff includes frequent review and discussion of City Ordinances, Development Standards, and stormwater regulations. New staff are trained by existing staff in a mentoring process along with annual attendance of Pima Association of Government's (PAG) annual stormwater construction seminar.

During fiscal year 2012-2013, the City will develop and present training on best management practices (BMPs) for street repair and road improvements to control the discharge of pollutants to the stormdrain system, to employees directly involved in these activities.

B. Municipally Owned and Operated Facilities

1. Municipal Facility Inventory: As discussed in the previous section, Central Safety Services maintains a list of City owned and operated facilities which are inspected as part of the Multi-Agency Inspection Team or MAITs Program. This list serves as a starting point for developing the required information for each facility. During Fiscal year 2011-2012, the following information will be added to the inventory (that have the potential to discharge pollutants to waters of the U.S.); latitude/longitude, facility contact, the operational status (operating or closed), the Standard Industrial Classification (SIC) code(s) which best reflects the services provided by each facility, and brief description of activities that may generate pollutants of concern as well as pollutants of concern and other factors of risk at such facilities.

2. Higher Risk Facilities: During fiscal year 2011-2012 MAITs Inspections, the Stormwater Inspector assigned to the team will collect information to assess the

potential of City owned and operated facilities to impact stormwater quality, and during 2012-2013, prioritize municipally owned facilities based on the following criteria:

i. Proximity to Lakeside Lake, an impaired water,
ii. Requirement for MSGP,
iii. Potential for impacting stormwater quality due to material handling, storage and use,
iv. Current priority City owned facilities include Lincoln Regional Park and Fred Enke Golf course, both located upstream of the impaired Lakeside Lake, Los Reales Landfill, MSGP # AZMSG-61695, and Price Service Center. These facilities are inspected annually.

C. Inspections

1. Prioritizing Areas of MS4 for Inspection: The City of Tucson, Department of Transportation, Streets and Traffic Maintenance Division shares responsibility for inspection and maintenance of the City's MS4 Drainage System with the Parks and Recreation Department. There are approximately 32 miles of drainage channels/washes and seven retention/detention basins located within City owned parks. All 32 miles of drainage channels within City owned parks are considered priority and are inspected a minimum of once a year. Based on system history, citizen complaints, and known maintenance concerns, the City annually inspects key areas of the stormdrain system located outside of City owned parks for the presence of illicit discharges, excess sediment, litter, debris or other pollutants that may obstruct flow or be transported in Stormwater. In addition, Stormwater Inspectors perform inspections of the City's MS4.

2. Municipal Facility Assessments: The City's Multi-Agency Inspection Team (MAITs) conducts annual inspections of all City owned and operated facilities. Follow-up inspections are conducted to verify that corrections have been performed as needed. The Stormwater Inspector assigned to MAITs will perform assessments of City facilities by the end of the second year of the permit, to determine if five or more gallons of potential Stormwater pollutants are stored in areas exposed to Stormwater. Based on this assessment, and on the types of activities performed, material stored and proximity to receiving waters, the City will determine which of these facilities will be considered high risk.

   The City shall identify municipal facilities inspected in the annual report and note whether improvements were needed. The City shall initiate any recommended improvements within 3 months of the inspection and set a schedule for implementation. The City will maintain a tracking system and the status of improvements and dates of implementation.

D. Infrastructure Maintenance

1. The City shall evaluate the drainage system maintenance priorities and update the inspection schedule at least once a year. The number of units (street miles, unit number of storm drain inlets, pounds of debris, *etc.*) cleaned each year in the annual report.

2. The Streets and Traffic Maintenance Division's current priorities for street sweeping for major arterial and collector streets is twice monthly, and sweeping streets in the central business district is three times each week. These priorities are reassessed annually. Street and parking lot sweeping in public parks is conducted through the Parks and Recreation Department. The City shall evaluate street sweeping frequency at least once a year. The number of units (street miles, broom miles, pounds of debris collected, *etc.*) shall be reported in the annual report for street and lot sweeping activities.

3. The City will assess all municipal maintenance activities performed by the City (e.g., paving and road repairs, saw cutting, concrete work, curb and gutter replacement, buried utility repairs and installation, vegetation removal, street and parking lot striping, drainage channel cleaning, *etc.*) and develop a control measure field manual for municipal maintenance activities within two years of permit issuance.

E. Municipal System Maps

The City's Geographic Information System (GIS) mapping system, is formatted as an Environmental Systems Research Institute (ESRI) Geodatabase feature class North America Datum of 1983 (NAD83) High Accuracy Reference Network (HARN) in State Plane Arizona Central Fips 0202 International Feet. The GIS based Stormwater Map, http://maps.tucsonaz.gov/stormwater currently contains the following information:

- Linear Drainage Structures: Line layer showing the location of Stormwater system pipes. The direction of flow can be determined based on the topographic layer.
- Storm Drain Grates and Catch Basins: Point layer showing the locations of storm drain grates and catch basins.
- Outfalls: Point layer showing the location of all major outfalls (field screen locations); polygon layer showing the drainage area associated with each of the five sampling sites where Stormwater is monitored.
- Detention/Retention Basins: Point or polygon layer showing the locations of all identified City-owned retention and detention basins

- Jurisdictional Boundary: Line or polygon layer showing the jurisdictional boundaries of the MS4, including any new land annexations during the permit term.

The additional features will include:

- Linear Drainage Structures
    - Line layer showing the location of all streets used for stormwater conveyance and the direction of stormwater flow.
    - Line layer showing other linear stormwater conveyance structures (channels, floodways, etc.) and the direction of stormwater flow.
- Land Uses – Polygon layer showing the land uses within each drainage area associated with each outfall.
- Detention/Retention Basins
    - Point layer showing the location of all privately-owned retention and detention basins that are connected to the municipal stormwater conveyance system (i.e., that receive drainage from or discharge to a stormwater conveyance).
    - Line layers showing the drainage infrastructure associated with each retention/detention basin.
- Locations of Discharges to Waters of the United States

Line or polygon layer showing the location (and name) of all waters of the U.S. that may receive stormwater discharges from the MS4 either directly or by way of a conveyance owned or operated by another person. Any water body that is listed as an Outstanding Arizona Water (A.A.C. R18 – 11-112) or as an Impaired Water (Arizona's 303(d) and other impaired water list(s) shall be clearly identified.

During the first four years of this permit, the City will incorporate mapping of additional features identified in the new MS4 permit. Completion of this effort is anticipated by September 30, 2015. In addition, the City will complete a study evaluating the costs, methods and time needed to further develop the City's GIS Stormwater Map. This study will also be completed by September 30, 2015.

V. Industrial and Commercial Facilities (Non-Municipally Owned)

The City of Tucson Stormwater Management Section is responsible for implementing the City's program to control pollutants in stormwater discharges from industrial and commercial facilities. Outreach to the industrial and commercial community on stormwater management is detailed in Sections I. and II. Public Education and Public Involvement.

A. Municipal Employee Training

New Stormwater Management Staff receive extensive training during their first year. Stormwater training incorporates both Stormwater Pollution Prevention Plans (SWPPP) review and inspection. An emphasis on cross training allows a few staff members to fill in as needed to meet fluctuations in workload. They receive extensive written materials, including a Stormwater Inspector Manual with inspection and enforcement procedures, manuals on the Arizona Construction and Multi-Sector General Permits, the Stormwater Ordinance (SWORD), the SWMP, and outreach materials for stormwater management for industrial and commercial facilities.

Stormwater Inspectors receive training every other year through seminars, educational videos and on-line training. Where applicable, training dates and topics are recorded for inclusion in the Stormwater Annual Report.

B. Inventory

OSHA training for City of Tucson employees includes the following key subject areas:

1. The Stormwater Management Section maintains a database of Industrial and Commercial facilities that have the potential to discharge pollutants to the City's storm sewer system. The list includes the facility name and address, and the Standard Industrial Classification (SIC) code(s) best reflects the principal products or services provided by each facility. In FY 2011-12, the Stormwater Management Section will add a brief description of the facilities' activities to the Industrial Facility Database. The database includes the following facilities:

    i. Industrial facilities identified in 40 CFR 122.26(d)(2)(iv)(C);
    ii. Industrial facilities subject to MSGP requirements, including those facilities that have submitted for a no exposure exclusion; and
    iii. Other industrial and commercial sources (or categories of sources) which the City determines to be a significant source of pollutants.

2. Higher Risk Facilities: During FY 2011-12, the Stormwater Management Section will prioritize higher risk facilities that are most likely to be sources of stormwater pollution. The risk assessment will include the type of facility, the products or services provided by the facility, proximity to receiving waters, receiving water quality, and other factors that indicate the potential to impact water quality.

3. Maintaining the Inventory: The Industrial Facility Database will be updated a minimum of biennially throughout the permit term through various means including correspondence with the facility, inspection visits to the facility, and semi-annual mailings to groups of facilities requesting their assistance in protecting

stormwater quality. The inventory will be reviewed biennially to determine if there are any facilities that have not filed a Notice of Intent (NOI) with the State of Arizona.

4. AZPDES Non-filers: When the City learns either through reporting or during a review of the Industrial Facility Database that a particular facility may not have obtained coverage as required under the Arizona MSGP, the City will report that facility's location and contract information to the ADEQ – Water Quality Compliance Section, Field services Unit Manager, Mail Code: 5415B-1, 1110 West Washington Street, Phoenix, AZ 85007 biennially. In addition, the City either calls or send a letter to the facility notifying them of the City's MS4 Permit requirement to report them to ADEQ.

5. Other Measures to Control Pollutants from Landfills, Municipal Waste Facilities, and Industrial Facilities: The City conducts annual inspections of Los Reales Landfill, despite the landfill's coverage under the MSGPs and its subsequent ranking as low–risk facility. This inspection is an additional measure to ensure that pollutants from landfills, municipal waste facilities, and industrial facilities are controlled.

6. Finding MSGP Targeted Industrial Facilities: In addition to the established inventory of industrial facilities, Stormwater Inspectors routinely visit areas of the City zoned for industrial uses and take note of new businesses. The City's business license database no longer references the SIC code, however, on-line searches of local business directories, are made to locate new facilities.

7. Notifying New Industries of MSGP Requirements: Once a new facility that is potentially targeted under Arizona's MSGP is identified, a Stormwater Inspector schedules a site visit to assess the facility, and if appropriate, provide an outreach packet with information on the MSGP permit requirements. In addition, the City advises the facility operator of the requirement to report them to ADEQ as a non-filer.

C. Inspections

1. Inspection Procedures: The industrial inspector verifies that an NOI has been filed and that a SWPPP exists for the facility. A review of the SWPPP is performed to verify that substantial elements required by the permit are addressed in the SWPPP. Additionally, an inspection of the site is performed to verify that the SWPPP is implemented and accurate. Outdoor materials handling and storage areas are inspected, along with hazardous materials handling, secondary containment measures, and spill controls. The location of stormwater flow entering and exiting the site is inspected. Potential sources of pollutants or illicit discharges are addressed during the inspection and in an inspection report. A thorough

inspection report is prepared and provided for the owner and operator of the facility.

2. Industrial Facility Inspections – Higher Risk: During FY 2011-12, the City will develop a system of identifying higher risk facilities. During 2012-2013, the City will prioritize industrial and commercial facilities in the Industrial Facility Database based on the following criteria:

   i. Requirement for MSGP,
   ii. Proximity to Lakeside Lake, an impaired water, and
   iii. Potential for impacting stormwater quality.

3. Inspect 20% of all facilities: The City will inspect a minimum of 20% of the industrial facilities in the City's Industrial Facilities Database annually. The number of inspections completed each year and corresponding findings and follow-up inspection will be documented in the annual report.

4. Enhancing the Industrial Facility Program: During the permit term, the Stormwater Management Section will evaluate alternatives for enhancing the industrial commercial stormwater program with the goal of increasing field presence through increased numbers of inspections and increasing interaction with commercial and industrial facilities through outreach or other innovative measures.

D. Compliance Activities and Enforcement

1. Enforcement Flow Chart: The City's enforcement process is illustrated by the enforcement flow chart, included in the Appendix. The flow chart shows escalation actions in response to the severity of the infraction, repeat offenses, and willful negligence.

2. Formal Enforcement Protocol: On or before September 30, 2013, the City will establish formal enforcement escalation protocol that focuses on having the highest level of enforcement resolved or turned over to the City court system within one year of the initial inspection/violation.

3. Industrial Facility Inspection Protocols: In FY 2011-12, the City will conduct a review of the City's procedures for Industrial Facility Inspections for effectiveness, make recommendations for improvements, and incorporate appropriate changes, including an enforcement response plan to address violations of municipal stormwater requirements, ordinance, or code identified during inspections.

4. The City will document in the Annual Report the number of corrective or enforcement actions taken during the reporting period including severity, elapsed time for resolution, penalties assessed, and outcome.

VI. Construction Sites

A. Municipal Employee Training

1. New Employees
   The City will provide new employee training at least one time per year and shall provide refresher training for existing employees directly involved in these activities at least once every two years. In the event there are no new employees in a given period, the City will document this information in the annual report.

2. Current Employees
   Current employees receive training in both SWPPP review and inspections. An emphasis on cross training allows a small staff to fill in as needed to meet fluctuations in workload. Current employees receive extensive written materials, including a Stormwater Inspector Manual with inspection and enforcement procedures, manuals on the Arizona Construction and Multi-sector General Permits, the Stormwater Ordinance (SWORD), and outreach materials for stormwater management for industrial and commercial facilities. Stormwater Inspectors also attend the Construction Seminar held every year.

B. Planning and Land Development

The City of Tucson has long advocated water harvesting, open space, native plant preservation, landscape requirements, riparian habitat preservation, scenic corridor, hillside preservation, and other practices to limit the impact of development on the environment, including stormwater quality. During development plan review, City plan reviewers verify that plans submitted for review comply with provisions of these ordinances. The City has previously submitted copies of ordinances related to these practices. However, in keeping with the requirements of the City's new MS4 permit, the City will submit additional copies of these ordinances with the first year's revision of the City's SWMP.

1. Additional Low Impact Development Practices: During the first four years of the new permit term, the City will continue to evaluate Low Impact Development (LID) practices to assess the feasibility of incorporating additional measures into the City's Planning and Development Services Department practices.

2. Names and Departments: The City will submit the titles and Departments of staff involved in evaluating additional low impact development practices. Individuals involved will include individuals from Planning and Development Services Department, and other City agencies as appropriate.

3. LID Implementation Study: By September 30 2015, the City will submit the results of a study determining how LID practices reduce stormwater pollution. In addition, the study will identify any additional, feasible LID practices for potential incorporation into City design standards. Before incorporating these practices into City design standards, new LID practices will need to be vetted in the community and taken before Mayor and Council for approval.

C. Plan Review and Approval

1. Plan Review: All new development and redevelopment plans for the private sector are reviewed for conformance with planning documents, City Code, ordinances, and development standard design manuals. The Planning and Development Services Department (PDSD) issues building permits and grading permits following plan approval. PDSD also administers the International Building Code (IBC), including the dedicated chapter on Excavation and Grading. This chapter includes requirements for structural and nonstructural post construction controls.

2. Plan Approval: All projects which are subject to the requirements of the Arizona Construction General Permit are required to submit a SWPPP, and NOI for review. Verification that the SWPPP and NOI are complete is a requirement for the issuance of a grading permit.

3. Pre-Construction Meetings: Planning and Development Services Department began holding pre-construction meetings for private construction projects in June 2005. The meeting provides an opportunity to review the SWPPP together and to make sure the developer understands the stormwater controls that must be utilized. Prior to breaking ground, the City holds a preconstruction meeting and requires that a copy of ADEQ's authorization document is included in the SWPPP.

D. Inventory

1. Permits Plus Database: The City uses the Permits Plus Database to track development plans and construction sites. Information in the database includes: requirement for a Construction General Permit, plan and SWPPP review comments, number of submittals, site location, and construction inspections.

2. Updating Database: The Permits Plus Database is continually updated as plans are submitted and reviewed, permits are issued, and construction sites are inspected.

3. Identifying and Documenting Non-filers: During the first site visit, PDSD Stormwater Construction Inspectors verify that the SWPPP has been implemented prior to the start of construction, and that the site has an ADEQ authorization number. In the event that this is not the case, the City will promptly notify the Stormwater Section.

4. City Department for NOIs: The City Department responsible for receiving copies of NOIs will be identified within the first permit term. The receiving Department's contact information will be included in subsequent Annual Reports.

E. Construction Site Prioritization

During FY 2011-12, the City will examine current construction site inspection priorities, and will establish a minimum inspection schedule that prioritizes construction sites with higher potentials to impact stormwater quality.

F. Inspections

1. Description of Inspection Program: PDSD has an AZPDES inspection program for construction sites within the City that disturb one or more acres. Each site inspection includes the following objectives:

   - Verifying existence of a SWPPP for that construction site;
   - Verifying that all substantial elements required by AZPDES Construction General Permit were addressed in the SWPPP;
   - Verifying that the plan was implemented; and
   - Verifying that the SWPPP evolves to meet changing construction conditions.

   During inspections the inspector looks for proper storage and use of construction site materials such as oils, hydraulic fluid and gasoline. City Inspectors make every

effort to ensure that any compliance issues are quickly handled before enforcement action is needed. The City of Tucson uses codes such as the Excavation and Grading Ordinance and the Stormwater Ordinance to assist in the enforcement of AZPDES construction site requirements. High priority sites are those that disturb over an acre of land.

2. Inspection Schedules: At a minimum, high priority construction sites are inspected once every three months and before a rain event, depending on the construction activity, and low priority sites are inspected at least once every six months.

3. Follow-up Inspections: In instances where Stormwater Inspectors observe stormwater quality issues which require action, the site is re-inspected within a month to ensure that the issues identified have been addressed.

G. Stormwater Control Measures

1. Additional Structural and Nonstructural Practices: The City requires that plans conform to the International Building Code which includes these erosion and sediment control requirements:

   - Maximum fill and cut slopes;
   - Maximum bench heights and widths;
   - Types of allowable fill materials;
   - Fill compaction requirements;
   - Setbacks of fill slopes from property boundaries;
   - Treatment of fill slopes and other slopes to prevent erosion from stormwater runoff;
   - Requirements for maximum fill/cut slopes for drainage channels;
   - Terracing drainage requirements, including erosion controls;
   - Subsurface drainage controls for stability;
   - Drainage way erosion control provisions;
   - Requirements for interceptor drains at top of slopes to prevent erosion;
   - City amendment prohibiting grubbing without first obtaining a grading permit;
   - City amendment for reseeding requirements, including the posting of bond; and
   - City amendment for proper construction of drainage facilities.

2. Standards for Construction Site Controls: By September 2013, the City will adopt a set of standards, based on a review of existing standards, such as ADOT's Erosion Control Manual, for installation and maintenance of construction site stormwater controls.

3. Review of Construction Inspection Procedures: By September 2012, the City will review stormwater inspection procedures for construction sites. This review will consider the current program effectiveness, make recommendations for improvements and incorporate appropriate changes.

4. Escalation Protocol: Construction Inspection Procedures will include enforcement timeframes and escalation for corrective actions. Enforcement timelines will focus on resolving the highest level of enforcement within one year.

H. Compliance Activities and Enforcement

1. Enforcement Flow Chart: The City's enforcement process is illustrated by the enforcement flow chart, included in the Appendix. The flow chart shows escalation actions in response to the severity of the infraction, repeat offenses, and willful negligence.

2. Formal Enforcement Protocol: On or before September 30, 2013, the City will establish formal enforcement escalation protocol that focuses on having the highest level of enforcement resolved or turned over to the City court system within one year.

VIII. Post-Construction

A. Review of Master Plan

Beginning in FY 2011-12 and before December 2013, the City will evaluate the existing Master Plan to ensure the plan contains stormwater pollutant controls which are adequate and effective. The findings and recommendations of this evaluation, as well as a schedule for implementing enhancements will be described in the FY 2012-13 Annual Report. The description will include planning procedures and post-construction practices to reduce the discharge of stormwater pollutants from newly-developed and redeveloped areas.

A. Municipal Employee Training

Municipal employee training for construction and post-construction is discussed under Section VI Construction Site Controls.

B. Post Construction Controls

The City will inspect projects in the post-construction phase to ensure controls are installed and are being maintained as approved. The City will inspect at least 75% of sites that have received City permits for earthwork or other ground disturbing

activities within one year after construction has been completed to determine the effectiveness of site stormwater controls.

Beginning in FY 2011-12, the City will develop an inspection, maintenance, and tracking program for Post-Construction Controls.

C. Compliance Activities and Enforcement

The City shall implement an effective compliance and enforcement program that incorporates escalating actions for violations of municipal stormwater requirements, ordinance or code.

The City shall document areas of non-compliance and follow-up actions taken by the City to achieve compliance.

Appendix

Protocols for Dry-Weather Screening of Outfalls (FSO)

Spill Response Program

Map of Field Screen Outfalls

Compliance Process

Stormwater Industrial Inspection Summary

Stormwater Management Section
Protocols for
Dry-Weather Field Screening of Outfalls (FSO)

The City of Tucson developed this set of protocols based on requirements of 40CFR 122.26(d)(1)(iv)(D) for preventing, detecting and eliminating illicit discharges to the stormdrain system. There are 500 field screening locations throughout the City for periodic evaluation in accordance with these procedures. These locations were determined by placing a ¼ mile grid over a map of the stormdrain system and finding a suitable outfall near each gridspace. In Tucson's stormwater system the outfall (field screen point) selected can be a drainpipe outlet, culvert, tributary wash, road dip section, or in areas where no suitable outlet structure could be identified the section of the watercourse within the grid was designated. Each year the program inspects 20% (100 sites) of these locations. During fiscal year 2011-2012, priority outfalls will be identified for annual inspection. These shall include:

1. Any MS4 outfalls to Atterbury Wash, upstream of Lakeside Lake, which is considered an impaired water.
2. All outfalls that have been a source of unresolved illicit discharges in the past five years. Note: no such outfalls are known to exist at this time, as the City has eliminated illicit discharges identified in the past, or has determined that the dry weather flow is not a significant source of pollutants.
3. Any other outfalls identified by the City as priority. Note: the City has not designated any additional outfalls as priority at this time.

The protocol for conducting these inspections is outlined below.

Prior to Inspections

1. Inspections should **not** be conducted within 72 hours of a measurable rainfall to avoid confusing accumulated stormwater from rain events with true dry-weather discharges.

2. The outfalls to be inspected for the current fiscal year should be identified in the existing database. The past inspections should be reviewed so the inspector can be aware of the previously noted conditions.

3. Blank inspection sheets should be prepared for the upcoming activities (see attached).

4. The Storm Water Test Kit should be collected from the laboratory and checked to ensure that the instructions, required glassware, and a full stock of reagents are present. Any missing elements should be ordered and replaced by the laboratory well in advance of the scheduled time for performing the inspections. Test and calibrate the pH meter to be used.

5. Any necessary safety equipment should be collected prior to going into the field for the inspection efforts.

6. Organize the outfall locations to be inspected on a given day into a logical sequence to minimize travel time between sites and backtracking across town.

7. Bring the following equipment, at a minimum, to the field when performing the field screening activities:
   - Inspection sheets
   - Outreach/Guidance Material
   - Safety Equipment
   - Clean Glass Beaker or Bottle
   - Cell phone, flashlight
   - Stormwater Test Kit/pH Meter
   - Camera
   - Pens/Pencils

Inspections

1. Travel to and locate the outfall to be inspected.

2. Safely access the outfall location. Bear in mind that access to certain sites may be hazardous and require the use of safety equipment or a less direct route.

3. If the outfall is located in a densely vegetated wash, extra care should be taken during entry – note that itinerant people and wildlife often live in such locations.

4. Fill out the general information part of the inspection sheet (date, time, inspector, outfall identifier, etc.).

5. If a particular outfall has been changed from its original location, the description of the outfall should be updated on the inspection report. This might include areas where development has occurred and a former dirt channel has been replaced by a drainpipe or riprap channel. If a particular outfall has been completely destroyed or removed, this should be noted on the inspection report and the Environmental Project Coordinator notified. An alternate outfall location may need to be established.

6. Identifying dry weather discharges: Once at the outfall, the inspector should look for any indication of dry-weather flow or illicit discharges. Such indications include, but are not limited to:
   - Flowing water
   - Ponding water or dampness
   - Lush vegetation not characteristic of the surrounding area
   - Unusual Staining
   - Deposits of evaporative products (salts)
   - Oil sheen or discoloration

7. Observe and record the condition of the outfall and note any indications that maintenance is needed, such as the presence of significant garbage/refuse, flow obstructions, structural or erosion damage, overgrowth of vegetation, etc.

8. Take at least one photograph at each outfall.

9. If evidence of recent flow is observed, the inspection should be repeated within three days to attempt to inspect during a dry weather flow incident.

10. If flowing water is present, the inspector should estimate the flow rate and record observations with brief descriptions of color, odor, turbidity of the water; oil sheen or surface scum. If there is enough flow to collect a discrete sample, field tests should be conducted and results recorded for: pH; chlorine, detergents, and phenols. If any of the field tests indicate the presence of contamination, indicated by unusually low or high pH (normal range is between 7-8.6), positive for chlorine (indicating a pool discharge or a potable water discharge), detergents (any positive test result indicates wash water or waste water) and phenols (any positive result indicates a potential industrial discharge) then a grab sample should be obtained and submitted to the analytical lab under contract to the City. The parameters to be tested at the lab will be determined by the Environmental Project Coordinator. The inspector should collect another grab sample for analysis within a 24-hour period, with a minimum period of four hours between samples.

11. If flowing or ponded water is present, *immediately* investigate to determine the source of the water. This may include searching upgradient in the drainage (inlet grates, catch basins, etc.) for inflows and/or illicit connections, reviewing stormdrain maps and records of the area, and interviewing persons who work at possible sources of inflow.

12. If the source of the discharge can be established, the inspector should determine if the discharge could qualify for the AZPDES De Minimus General Permit. Qualifying Discharges include:
    - Discharges associated with operation and maintenance of the potable or reclaimed water systems, well development, or well monitoring,
    - Residential dechlorinated swimming pool discharges,
    - Discharges from residential coolers and air conditioning condensate,
    - Discharges from residential or charity exterior car washing where only water or biodegradable soaps are used,
    - Building or street-wash water where only water or biodegradable soaps are used.

13. If the source of the discharge qualifies for the De Minimus General Permit, and if the results of the field tests are negative, then the discharge is not considered to be a significant source of pollutants. Please note, however, that swimming pool (and spa) discharges should follow Stormwater Management Section guidelines. If the source qualifies for the De Minimus General Permit and field test results indicate the presence of pollutants, ADEQ should be notified.

14. If the source is determined to be irrigation overflow, or a potable or reclaimed line leak, Tucson Water should be notified. Tucson Water's Water Cop will investigate wasting of potable or reclaimed water under the City's Water Waste and Theft Ordinance.

15. If the source is determined to be residential gray water, notify the discharger that under ADEQ rules, gray water must remain on the discharger's property. Advise the discharger

that if the discharge off their property continues, they could be cited under Tucson City Code and reported to ADEQ for possible further enforcement.

16. If the source can be determined and has the potential to be a source of pollutants, as evidenced by field or laboratory testing, it should be considered illicit, and the following steps should be taken to cease the discharge to the stormdrain system: discussion with responsible parties, distribution of guidance materials, issuance of a compliance status letter, notice of violation, enforcement action, and notification of regulatory authorities.

17. If the source of a dry weather flow cannot be determined, and test results indicate the presence of a pollutant, the inspector should report their findings to the Environmental Project Coordinator for further investigation. Further investigation may include: researching stormdrain maps and contributing drainage areas, conducting more extensive field surveys, performing a confined space entry into the stormdrain, or performing dye tests and other tests to be determined on a case by case basis.

18. Any outfall that exhibited flowing or standing water during an inspection should be revisited within at least two weeks from the original inspection date to see if the discharge is continuing or if corrective actions have been effective. Follow-up monitoring of the outfall should be continued on an as needed basis until the dry weather discharge has been eliminated, or until further investigations conclude that the discharge is not a significant source of pollutants.

After Inspections

1. Enter the results of each inspection into the Field Screen Outfall (FSO)database for the current fiscal year, and file electronic copies of photos in the FSO directory and inspection sheets in the FSO file folder.

2. Notify Streets and Traffic Maintenance Division of any field screening location requiring maintenance including areas with significant garbage/refuse, flow obstructions, structural or erosion damage, overgrowth of vegetation, etc.

3. Prepare a brief report for any illicit discharges detected, provide flow observations, test results, identify the source (if it can be determined), and list actions taken to stop the discharge. This report will be used to notify appropriate authorities if the discharge continues, or will be summarized in the Annual Report.

4. Prepare a table of findings and a summary of field screen activities for the annual report.

5. Identify outfalls that have been eliminated. Work with Environmental Project Coordinator to identify replacement outfalls.

FIELD SCREENING

DATE: _____ CELL DESIGNATION: _____

TIME: _____ TOWNSHIP, RANGE, SECTION: _____

INSPECTOR: _____ OUTFALL NUMBER: _____

LOCATION OF OUTFALL: in _____ wash at: _____

_____ OUTFALL TYPE: _____

DRY WEATHER CONDITIONS: _____

_____

SAMPLE NO. 1

DATE: _____ TIME: _____

COLOR: _____ ODOR: _____
(Describe) (Describe)

FLOW ESTIMATE: _____ TURBIDITY: _____
(Gals/Min.) (Describe)

pH: _____(SU) TEMPERATURE: _____(C)

SURFACE SCUM AND OIL SHEEN: _____
(Describe)

CHLORINE: _____(PPM) COPPER: _____(PPM)

PHENOL: _____(PPM) SURFACTANTS: _____(PPM)

COMMENTS: _____

_____

SAMPLE NO. 2

DATE: _____ TIME: _____

COLOR: _____ ODOR: _____
(Describe) (Describe)

FLOW: _____ TURBIDITY: _____
(Gals/Min.) (Describe)

pH: _____(SU) TEMPERATURE: _____(C)

SURFACE SCUM AND OIL SHEEN: _____
(Describe)

CHLORINE: _____(PPM) COPPER: _____(PPM)

PHENOL: _____(PPM) SURFACTANTS: _____(PPM)

COMMENTS: _____

_____

1.0 PURPOSE

The purpose of this policy is to minimize hazards to health, safety, and the environment at sites or facilities where regulated or potentially hazardous substances and chemicals are used, stored and handled and to provide direction when regulated or hazardous materials are spilled.

The majority of these spill incidents will relate to fuel, hydraulic fluid, or anti-freeze spills that occur in the field.

Where applicable, this program shall be used in conjunction with the Environmental Management Program (EMP) Policy and Incident Notification Procedure (http://intranet.ci.tucson.az.us/docs/ad/8-01-1.pdf), Emergency Response Guidebook and the electronic MSDS system.

2.0 SCOPE

The policies and procedures contained in this section are intended to assist in identifying and complying with the regulations and rules set forth by the Occupational Safety and Health Administration (OSHA), the Environmental Protection Agency (EPA), Arizona Department of Environmental Quality (ADEQ), the Department of Transportation (DOT), the Tucson Fire Code (TFC), as well as other applicable local, state, and federal regulations. In all cases where there is a conflict between information contained in this program and/or regulatory requirements, the stricter policy shall apply.

3.0 DEFINITIONS

Absorbent: a biodegradable substance that is applied to mitigate an uncontrolled release or incidental release of a regulated or potentially hazardous substance. Trade names may include Dri-sorb, Magic-Sorb or MicroBlaze or similar. Contaminated dry-type absorbents (Dri-sorb and Magic-Sorb) shall be recovered to the best practicable manner and disposed of in a manner appropriate for the spilled or released material.

Emergency Uncontrolled Release: means an occurrence which results, or is likely to result, in an uncontrolled release of a regulated or potentially hazardous substance that may cause a safety, health, or environmental hazard (e.g., fire, explosion, chemical exposure, leak into sewers and/or storm drains or other drainage conveyance systems including washes) or that impacts (contaminates) public property and may result in a liability claim against the City of Tucson. An Emergency Uncontrolled Release cannot be controlled or contained with the contents of a Spill Kit. An Emergency uncontrolled release of a regulated or potentially hazardous substance shall require immediate 911 and supervision notification.

Facility: means any building, structure, installation, equipment, pipe, or pipeline, well, pit, pond, lagoon, impoundment, ditch, storage, container, motor vehicle, rolling stock, or aircraft, or any site or area where a hazardous substance has been stored, disposed of, or placed, or otherwise come to be located.

Hazardous Substance: means any biologic or chemical agent which after release into the environment and upon exposure, ingestion, inhalation, or assimilation into any person, either directly or indirectly from the environment or ingestion through food chains, will or may reasonably be anticipated to cause injury or death, disease, behavioral abnormalities, cancer, genetic mutation, physiological malfunctions, or physical deformations in such persons or their offspring. A typical example would be gasoline.

Incidental Release: means a release of hazardous substances *other than* fluid droplets that are normally associated with parked or normally operating mechanical equipment, that are absorbed, neutralized, or otherwise controlled and contained at the time of release by employees in the immediate release area, or by maintenance personnel. An Incidental Release of a regulated or potentially hazardous substance shall require notification to supervision and may require 911 notification after evaluation of the incident by supervision.

Notification: Contact made to 911 and/or Supervision in the event or an Emergency Uncontrolled Release or Incidental (Controlled) Release of a regulated or potentially Hazardous Substance.

Mitigation: The control and cleanup of any Hazardous Materials substance resulting from an emergency spill or incident release.

Reporting: **All** Emergency and Incidental Releases of regulated or potentially Hazardous Substances shall be reported to the Tucson Fire Department, Fire Prevention Captain, Stormwater Management, and the Environmental Services EMP Coordinator via the Spill Incident Reporting Form (Appendix B).

Ribbon Spill: A trail of potentially Hazardous Material/substance released from a moving vehicle. A Ribbon Spill release on the public right-of-way or public (private) property will require 911 notification, the completion of a Spill Incident Report, and may require completion of Form 103 – Property Damage Report.

Spill Kit: A combination of absorbent pads and personal protective equipment normally provided to department Supervisors that will contain and control minor hazardous material spills (less than 5 gallons or less than 5’ x 5’ - 25sq’) preventing “puddle” liquid spread and further contamination of public or private property, sanitary sewers, storm sewers or washes.

Spray Release: A release of a regulated or potentially hazardous substance, (typically hydraulic fluid), from a pressurized hose or line. A Spray Release will normally require completion of a Spill Incident Report and mitigation and may require the Completion of Form 103 – Property Damage Report.

4.0 RESPONSIBILITIES

A. Department Director/Administrator

1. The Director and/or Administrator of each department/division where employees work with regulated, potentially, or know hazardous substances shall be responsible for the following:

   a. Assigning one individual and one alternate, as an Emergency Control Officer (ECO)/Safety Officer, responsible for implementation of the Spill Response Program in their department. These individuals shall be afforded adequate time, resources, and authority to implement the requirements of this program including implementing policies that encourage waste minimization and minimizing the amount of hazardous material/waste in the workplace.

   b. Compliance with the Spill program.

B. Emergency Control Officer/Safety Officer – Department and Division

1. The person responsible for spill control in each department shall be responsible for the following:

   a. Evaluate every spill incident and make immediate and proper notifications as defined in this Program.

   b. Ensure that where applicable, a Facility Emergency Response Plan (FERP) plan has been developed in direct consultation with Environmental Services – Engineering and Technical Support Division, for all sites utilizing and/or storing hazardous

   c. Providing a facility diagram for all work areas where hazardous substances are used, stored, or handled. These diagrams shall be in the FERP, ensuring that all items listed in the example form are clearly identified (exit doors, sprinkler control valves, etc.) and provide safe and orderly emergency evacuation of occupants.

   d. Documenting each incident, whether it is an emergency or an incidental release of hazardous materials via the Spill Incident Reporting Form (Appendix B).

   e. Reviewing this program with each new employee to ensure familiarization with evacuation routes and safe zones. Annual training on Employee Evacuation is available from Central Safety Services through the Annual OSHA Refresher and is posted on the City Intranet http://intranet.ci.tucson.az.us/css/page.php?path=evacuation/evacuationmain.html

   f. Reviewing this program periodically to determine relevance to departmental activities with existing conditions and regulatory rules.

C. Tucson Fire Department

1. The Tucson Fire Department (TFD) is responsible for providing the technical expertise, trained and equipped personnel, for the prevention, mitigation, and resolution of incidents involving hazardous substances and wastes. TFD shall:

   a. **NOTIFY ENVIRONMENTAL MANAGEMENT PROGRAM (EMP) COORDINTOR OF ALL SPILL INCIDENTS AS SOON AS POSSIBLE. Business Hours: 520-791-5414; 24 Hour Cell Phone 520-403-0295.**

   b. Provide emergency response personnel to control and mitigate workplace hazardous substance spills. These personnel are assigned to the Fire suppression Division, Hazardous Materials Team, and are available for emergency response 24 hours per day.

   c. Provide an inspector knowledgeable in hazardous materials. This individual responds to emergency scenes at which his/her knowledge of the fire code or other pertinent regulations including NPDES Stormwater regulations as required.

   d. The Inspector shall contact EMP and Tucson Stormwater personnel as needed. Large spills or releases of regulated or potentially hazardous materials shall be evaluated by the TFD and EMP to develop a mitigation or remediation plan.

   e. The Inspector shall act as the contact person to access the Tucson Fire Department's Hazardous Waste Disposal Program after normal business hours. The On Call Inspector may be reached by notifying City Communications at 791-4144 and requesting the "On Call" Inspector.

   f. Provide Hazardous Materials Disposal Technicians. These personnel are available to assist with the proper handling, storage, and disposal of hazardous substances and wastes found in the work place.

   g. Provide a supervisor to evaluate and supervise cleanup of accidental spills which are the result of City operations or are discovered on City property or rights of way and are determined to be a threat to the city's storm drains or washes. This supervisor or his/her designee shall be available 24 hours per day. This supervisor shall be a Fire Captain assigned to the Fire Prevention Division. He/she can be reached at 791-4502 during normal working hours or through City Communications (791-4144) after hours. This individual shall work closely with EMP Coordinator to ensure that all required notifications both internal and external are made in a timely manner. All City

caused spills reported to the Fire Department will be forwarded to EMP Coordinator or Environmental Services (ES) Deputy Director.

h. The Captain assigned to the Compliance Assistance Unit of the Fire Prevention Section shall coordinate, debrief and review the spill incident with all affected departments to ensure proper and timely notifications are made including the filing of all required reports and notice.

i. The Captain assigned to the Compliance Assistance Unit of the Fire Prevention Section shall be responsible for replacement of Spill Kits, absorbent or other mitigation materials and shall require a written Spill Incident Report prior to replacement of used and/or contaminated materials.(See the Spill Incident Reporting Form - Appendix B).

D. <u>Environmental Management Program</u>

1. Environmental Management Program (EMP) is responsible for assisting with the City's compliance to applicable environmental regulations. EMP is responsible for the following:

   a. EMP will notify the City Manager of incidents when appropriate. EMP and Stormwater Management shall receive a copy of ALL incident reports within 48 hours from the Captain assigned to the Assistance Unit of the Fire Prevention Section.

   b. EMP shall notify Stormwater Management Section of any spills that threaten washes or the storm drain system.

E. <u>Central Safety Services (CSS)</u>

1. CSS Shall:

   a. Assist all departments in the development and review of work practices, procedures, and the evaluation of exposure control strategies for employees working with hazardous substances.

   b. Assist departments/divisions/sections in determining appropriate training requirements and Personal Protective Equipment selection for employees assigned to duties involving work with hazardous substances and waste. CSS shall produce, provide, coordinate and fund this training.

   c. Coordinate and conduct periodic review of this program in conjunction with affected departments, TFD, EMP and Stormwater.

F. Stormwater Management

1. Tucson Stormwater shall respond to spills of hazardous materials that may enter the storm water system through storm drains, washes, arroyos or similar, and document these incidents in their permit's annual report.

G. Employees

1. City of Tucson employees shall be responsible for following the policies and procedures outlined in this program.

5.0 TRAINING

1. Central Safety Services shall coordinate training for all Emergency Control Officers, Supervisors and employees. The training shall include but not be limited to:

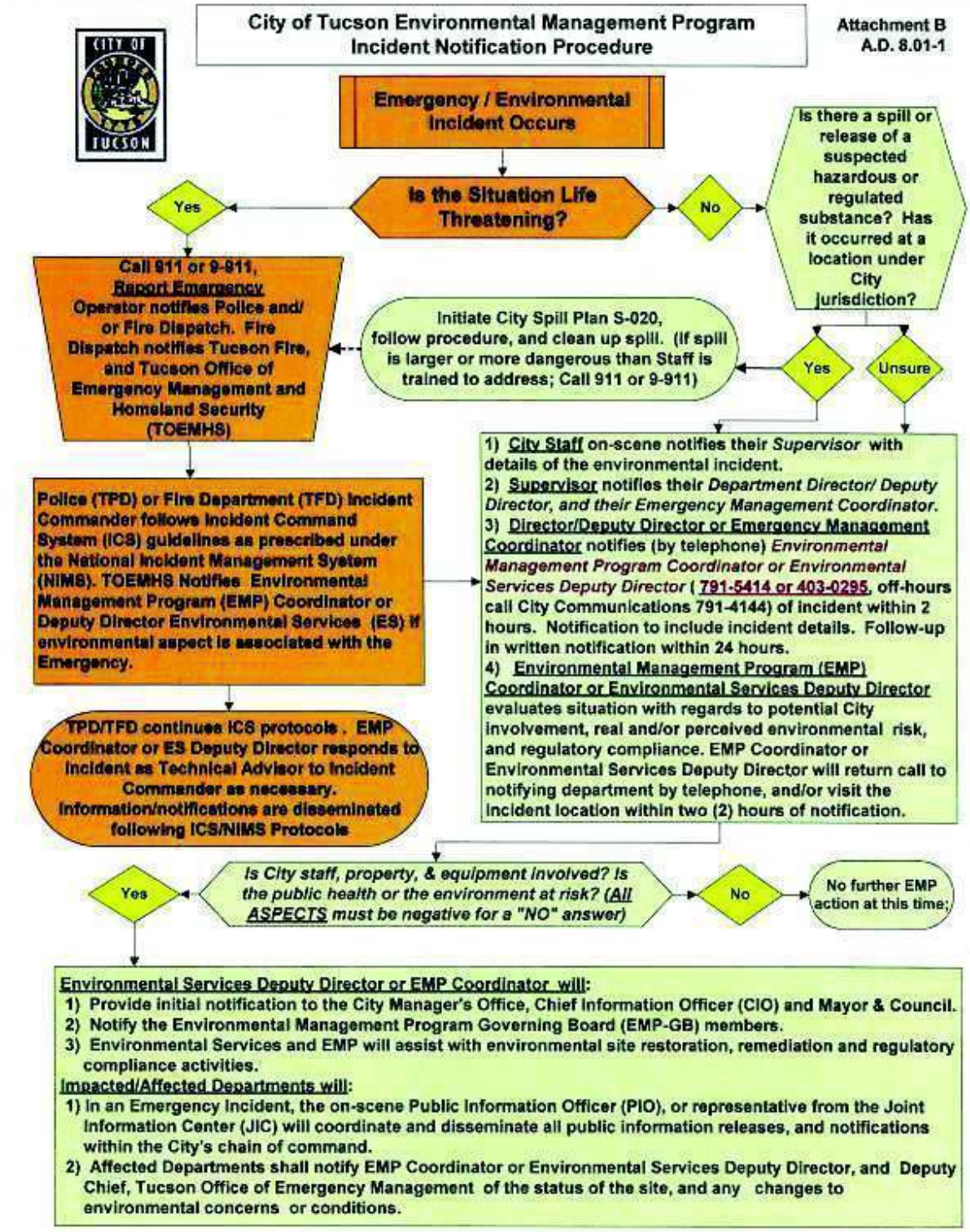
    a. Spill characterization – Emergency Release and Incidental Release.
    b. Notification procedures
    c. Control and Mitigation strategies.
    d. Documentation requirements specified in this program.

6.0 GENERAL

Refer to Page 7 – City of Tucson Environmental Management Program Policy and Notification Procedure (http://intranet.ci.tucson.az.us/docs/ad/8-01-1.pdf.)

7.0 ADVICE AND COUNSEL

Central Safety Services, Tucson Fire Department, Environmental Services, Environmental Management Program, and Tucson Stormwater shall review this program at least annually, when responsibilities for reporting or program management change and when a hazardous materials spill incident indicates a change in the program is warranted.


City of Tucson Environmental Management Program
Incident Notification Procedure
Attachment B
A.D. 8.01-1
Emergency / Environmental Incident Occurs
Is the Situation Life Threatening?
Yes
No
Is there a spill or release of a suspected hazardous or regulated substance? Has it occurred at a location under City jurisdiction?
Yes
Unsure
Call 911 or 9-911, Report Emergency Operator notifies Police and/ or Fire Dispatch. Fire Dispatch notifies Tucson Fire, and Tucson Office of Emergency Management and Homeland Security (TOEMHS)
Initiate City Spill Plan S-020, follow procedure, and clean up spill. (If spill is larger or more dangerous than Staff is trained to address; Call 911 or 9-911)
1) City Staff on-scene notifies their Supervisor with details of the environmental incident.
2) Supervisor notifies their Department Director/ Deputy Director, and their Emergency Management Coordinator.
3) Director/Deputy Director or Emergency Management Coordinator notifies (by telephone) Environmental Management Program Coordinator or Environmental Services Deputy Director (791-5414 or 403-0295, off-hours call City Communications 791-4144) of incident within 2 hours. Notification to include incident details. Follow-up in written notification within 24 hours.
4) Environmental Management Program (EMP) Coordinator or Environmental Services Deputy Director evaluates situation with regards to potential City involvement, real and/or perceived environmental risk, and regulatory compliance. EMP Coordinator or Environmental Services Deputy Director will return call to notifying department by telephone, and/or visit the incident location within two (2) hours of notification.
Police (TPD) or Fire Department (TFD) Incident Commander follows Incident Command System (ICS) guidelines as prescribed under the National Incident Management System (NIMS). TOEMHS Notifies Environmental Management Program (EMP) Coordinator or Deputy Director Environmental Services (ES) if environmental aspect is associated with the Emergency.
TPD/TFD continues ICS protocols . EMP Coordinator or ES Deputy Director responds to incident as Technical Advisor to Incident Commander as necessary. Information/notifications are disseminated following ICS/NIMS Protocols
Is City staff, property, & equipment involved? Is the public health or the environment at risk? (All ASPECTS must be negative for a "NO" answer)
Yes
No
No further EMP action at this time;
Environmental Services Deputy Director or EMP Coordinator will:
1) Provide initial notification to the City Manager's Office, Chief Information Officer (CIO) and Mayor & Council.
2) Notify the Environmental Management Program Governing Board (EMP-GB) members.
3) Environmental Services and EMP will assist with environmental site restoration, remediation and regulatory compliance activities.
Impacted/Affected Departments will:
1) In an Emergency Incident, the on-scene Public Information Officer (PIO), or representative from the Joint Information Center (JIC) will coordinate and disseminate all public information releases, and notifications within the City's chain of command.
2) Affected Departments shall notify EMP Coordinator or Environmental Services Deputy Director, and Deputy Chief, Tucson Office of Emergency Management of the status of the site, and any changes to environmental concerns or conditions.

Environmental Spill Incident/Release Form

A. General Information

1. Location of Incident:_____

_____

2. City of Tucson Department involved? ☐ **Yes** ☐ **No** **Vehicle Number**_____

Name of Department:_____**Division:**_____

3. Non-City Party Involved? ☐ **Yes** ☐ **No**

Name:_____ **Phone Number:**_____

Address:_____

Weather Conditions: ☐ **Wet,** ☐ **Dry,** ☐ **Hot,** ☐ **Cool,** ☐ **Cold,** ☐ **Sunny,** ☐ **Rainy**

B. Incident Description

1. Date: __/___/___	**2. Time Started: _____**☐ **AM** ☐ **PM, Ended_____**☐ **AM** ☐ **PM**
3. Type(Name) of Material Released:	**4. Amount of Material Released:**
5. Enter Storm Drain? ☐ **Yes** ☐ **No**	**6. Quantity Entered Storm Drain:_____**

7. Nearest Wash or Stream:_____

8. Describe Incident:_____

_____☐ **Spill,** ☐ **Container Failure,** ☐ **Hose Failure**

C. Corrective Action (CA)

1. Incident Corrected? ☐ **Yes** ☐ **No**	**2. Date/Time of CA:_____**☐ **AM** ☐ **PM**

3. Corrected By: ☐ **TFD,** ☐ **COT Department**_____ ☐ **Contractor (Name/Phone**_____**)**

4. Describe CA:_____

_____

5. Magic Sorb Used:_____(bags/lbs)	**6. Dry Sorb Used:_____(bags/lbs)**

Incident Reporter's Information

1. Last Name:_____	**2. First Name:_____**
3. Employee Number:_____	**4. Phone Numbers: _____**

5. Contacted: ☐ **911,** ☐ **TFD (791-4014),** ☐ **EMP (403-0295),** ☐ **Supervisor _____,**

☐ **Stormwater (791-4251),** ☐ **Central Safety (837-4308),** ☐ **Other**_____

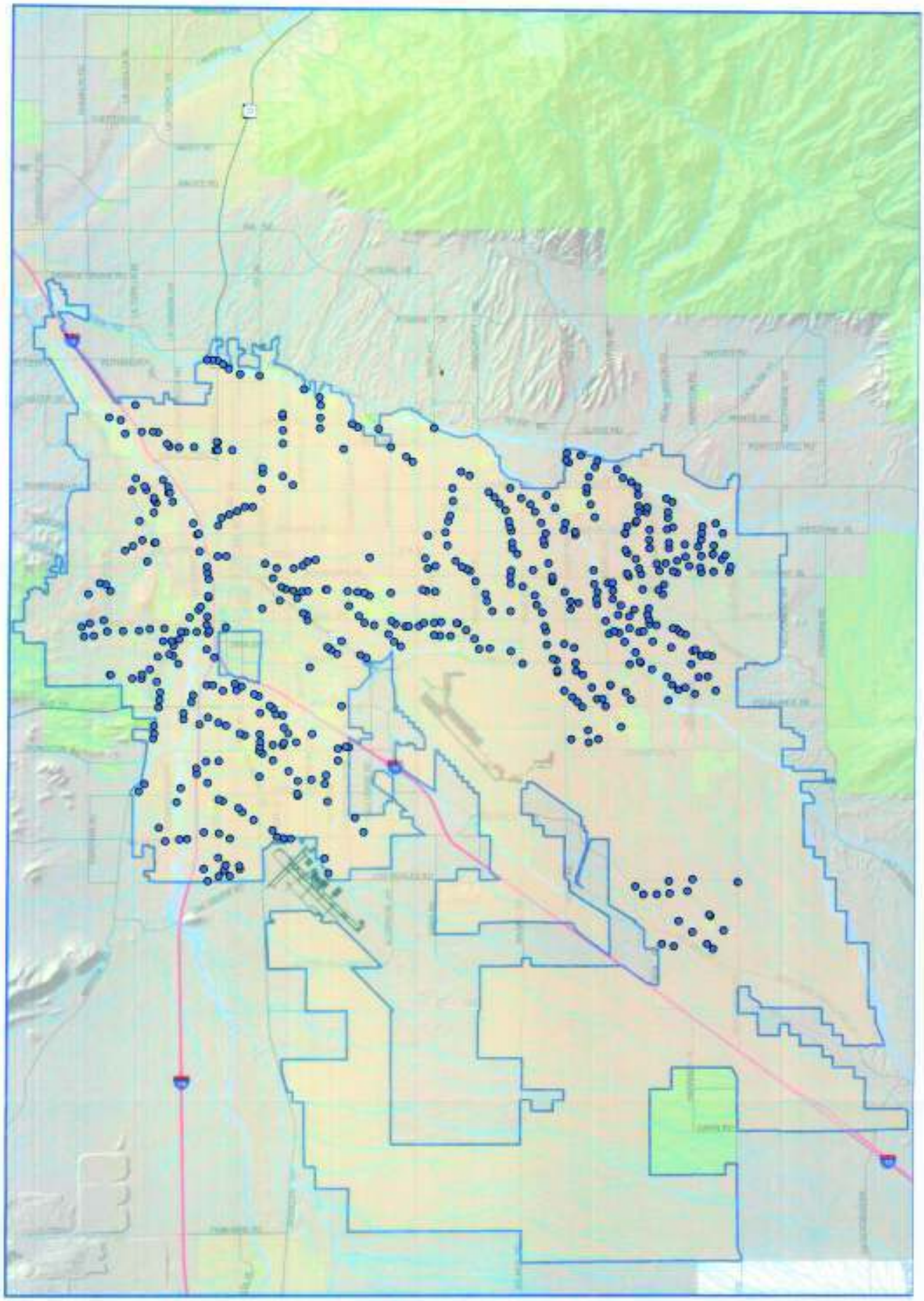
Date/Time:_____☐ **AM** ☐ **PM**

6. Photos Taken of Incident? ☐ **Yes** ☐ **No….Attach to Report**

7. Waste Disposal Method:_____

8 Signature:_____**Date:_____/_____/_____**

Fax to: TFD @ 791-5346, EMP @ 791-5417, CSS @ 791-4236, TDOT @ 791-4373



Date: 6/15/2012

CITY OF TUCSON FIELD SCREEN OUTFALLS

LEGEND

Inspection Locations

City of Tucson

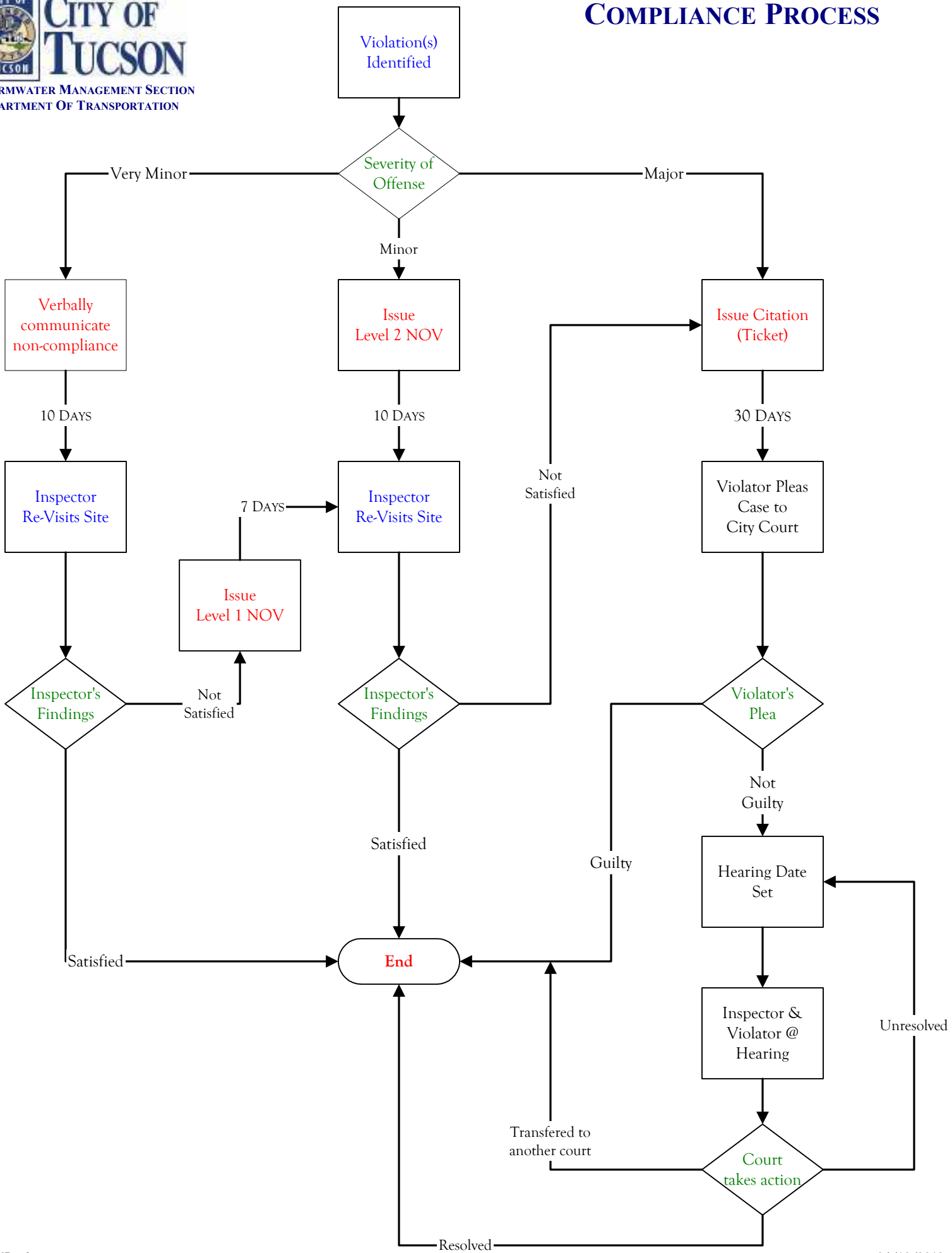
1 in = 2 miles

N

CITY OF TUCSON

CITY OF TUCSON
STORMWATER MANAGEMENT SECTION
DEPARTMENT OF TRANSPORTATION

COMPLIANCE PROCESS



STORMWATER INDUSTRIAL INSPECTION SUMMARY

FACILITY INFORMATION

NAME: _____ LATITUDE: _____
ADDRESS: _____ LONGITUDE: _____
BUSINESS TYPE/ACTIVITY: _____
STANDARD INDUSTRIAL CODE (SIC): _____ NORTH AMERICAN INDUSTRY CLASSIFICATION SYSTEM (NAICS): _____

FACILITY CONTACT INFORMATION:

NAME: _____ PHONE: _____ FAX: _____

OWNER INFORMATION:

NAME: _____ PHONE: _____ FAX: _____
ADDRESS: _____

INSPECTION INFORMATION:

INSPECTED BY: _____ INSPECTION DATE: _____
PHONE: _____ FOLLOW UP INSPECTION: _____
ACCOMPANIED BY: _____
ENFORCEMENT ACTIONS: _____

INSPECTION RESULTS:

PERMIT TYPE:	Multi-Sector		NOI FILED:	Yes	No
PERMIT #:			AUTHORIZED:	Yes	No
PRIORITY INDUSTRY:	Yes	No	SWPPP IN PLACE:	Yes	No
SARA III	Yes	No	SWPPP COMPLETE:	Yes	No

SWPPP EVALUATION:

REVIEW

	YES	NO
WORKPLACE NARRATIVE		
POLLUTION PREVENTION TEAM		
POLLUTANT SOURCES IDENTIFIED		
SITE MAP		
INVENTORY OF EXPOSED MATERIALS		
MONITORING REQUIREMENTS		
RECORDKEEPING REQUIREMENTS		
SPILL INVENTORY / CONTROL PLAN		
SIGNED CERTIFICATION		
BMP'S IDENTIFIED		

IMPLEMENTATION

	YES	NO
EMPLOYEE TRAINING		
POLLUTANT SOURCE IDENTIFICATION ACCURACY		
SITE MAP VS ACTUAL FIELD CONDITION		
COMPREHENSIVE SITE EVALUATION		
SPILL PREVENTION COUNTER CONTROL		
MONITORING PLAN FOLLOWED		
RECORDS REVIEW		
SPILL RESPONSE PROCEDURE		
EMPLOYEE TRAINING		
BMPS EMPLOYED		

BMPS:

	ACTIVITY	DESCRIPTION AND EFFECTIVENESS
OUTDOOR	PROCESS/MANUFACTURING AREAS	
	MATERIAL STORAGE AREAS	
	WASTE STORAGE/DISPOSAL AREAS	
	VEHICLE AND HEAVY EQUIPMENT STORAGE/MAINTENANCE AREAS	
	WASH AREAS	
	OUTDOOR DRAINAGE FROM INDOOR ACTIVITIES	
	OTHER (DESCRIBE)	

COMMENTS:

INSPECTOR

SIGNATURE PRINTED NAME DATE